

AMENDMENTS TO THE CLAIMS

The following is a complete, marked-up listing of revised claims with a status identifier in parenthesis, underlined text indicating insertions, and strike through and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) A ~~computer-readable~~recording medium storing a ~~computer executable~~-data structure for managing reproduction of data streams having ~~multiple~~ a plurality of reproduction paths, comprising:

a data area ~~configured to store~~storing a plurality of transport ~~stream~~-packets of the data streams, the transport ~~stream~~-packets having respective packet identifiers (PID); and

a navigation area ~~configured to store~~storing a playlist for managing playback of the data ~~stream~~streams, the playlist including a plurality of playitems~~playitem~~ indicating a playing interval of the data ~~stream~~streams, each of the playing intervals including an IN-point and OUT-point indicating positions of the data streams, and the playitem including a packet identifier information field indicating the packet identifier (PID) of the transport ~~stream~~-packets associated with the playitem such that the packet identifier information field identifies a reproduction path among the ~~multiple~~plurality of reproduction paths for the playing interval of each playitem.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) The ~~computer-readable~~recording medium of claim 1, wherein the data streams are elementary data streams.

6. (Cancelled)

7. (Currently Amended) The ~~computer-readable~~recording medium of claim 6, wherein the data area stores the data streams multiplexed together.

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) The ~~computer-readable~~recording medium of claim 1, wherein the data streams include video data streams.

14. (Currently Amended) The ~~computer-readable~~recording medium of claim 13, wherein the data streams further include at least one of audio data streams, graphics data streams and subtitle data streams.

15. (Cancelled)

16. (Cancelled)

17. (Currently Amended) A method of recording a data structure for managing reproduction of data streams having ~~multiple~~a plurality of reproduction paths recorded on a ~~computer-readable~~recording medium, comprising:

recording a plurality of transport ~~stream~~-packets of the data streams in a data area of the ~~computer-readable~~recording medium, the transport ~~stream~~-packets having respective packet identifiers (PID); and

recording a playlist including a plurality of playitems~~playitem~~ indicating a playing interval of the data ~~stream~~streams in a navigation area of the ~~computer-readable~~recording medium, each of the playing intervals including an IN-point and OUT-point indicating positions of the data streams, and the playitem including a packet identifier information field indicating the packet identifier (PID) of the transport ~~stream~~-packets associated with the playitem such that the packet identifier information field identifies a reproduction path among the ~~multiple~~plurality of reproduction paths for the playing interval of each playitem.

18. (Currently Amended) A method of reproducing a data structure for managing reproduction of data streams having ~~multiple~~a plurality of reproduction paths recorded on a ~~computer-readable~~recording medium, comprising:

reproducing a playlist including a plurality of playitems~~playitem~~ indicating a playing interval of the data streams from a navigation area of the ~~computer-readable~~recording medium, each of the playing intervals including an IN-point and OUT-point indicating positions of the data streams, and the playitem including a

packet identifier information field indicating a packet identifier (PID) of a transport ~~stream-packets~~packet of the data streams associated with the playitem such that the packet identifier information field identifies a reproduction path among the ~~multiple~~plurality of reproduction paths for the playing interval of each playitem; and reproducing the transport ~~stream~~-packet having the packet identifier indicated by the packet identifier information field from a data area of the ~~computer readable~~recording medium.

19. (Currently Amended) An apparatus for recording a data structure for managing reproduction of data streams having ~~multiple~~a plurality of reproduction paths on a ~~computer readable~~recording medium, comprising:

a pickup configured to record a plurality of transport ~~stream~~-packets of the data streams in a data area of the ~~computer readable~~recording medium, the transport ~~stream~~-packets having respective packet identifiers (PID); and

a controller, ~~operably coupled to the pickup~~, configured to control the pickup to record a playlist including a plurality of playitems~~playitem~~ indicating a playing interval of the data ~~stream~~streams in a navigation area of the ~~computer readable~~recording medium, each of the playing intervals including an IN-point and OUT-point indicating positions of the data streams.

wherein the controller is further configured to control the pickup to record a packet identifier information field in the playitem, the packet identifier information field indicating the packet identifier (PID) of the transport ~~stream~~-packets associated with the playitem such that the packet identifier information field identifies a reproduction path among the ~~multiple~~plurality of reproduction paths for the playing interval of each playitem.

20. (Currently Amended) An apparatus for reproducing a data structure for managing reproduction of data streams having ~~multiple~~a plurality of reproduction paths recorded on a ~~computer-readable~~recording medium, comprising:

a pickup configured to reproduce a plurality of transport ~~stream~~-packets of the data streams from a data area of the ~~computer-readable~~recording medium, the transport ~~stream~~-packets having respective packet identifiers (PID); and

a controller, ~~operably coupled to the pickup~~, configured to control the pickup to reproduce a playlist including a plurality of playitems~~playitem~~ indicating a playing interval of the data streams from a navigation area of the ~~computer-readable~~recording medium, each of the playing intervals including an IN-point and OUT-point indicating positions of the data streams.

wherein the controller is further configured to control the pickup to reproduce a packet identifier information field in the playitem, the packet identifier information field indicating the packet identifier (PID) of the transport ~~stream~~-packets associated with the playitem such that the packet identifier information field identifies a reproduction path among the ~~multiple~~plurality of reproduction paths for the playing interval of each playitem.

21. (Currently Amended) The ~~computer-readable~~recording medium of claim 1, wherein the data streams are multi-angle data streams, and the playitem further includes a field indicating an angle number.

22. (Currently Amended) The method of claim 17, wherein the data streams are multi-angle data streams, and the playitem further includes a field indicating an angle number.

23. (Previously Presented) The method of claim 17, further comprising:
multiplexing the data streams together.

24. (Currently Amended) The method of claim 18, wherein the data streams are multi-angle data streams, and the playitem further includes a field indicating an angle number.

25. (Previously Presented) The method of claim 18, further comprising:
de-multiplexing the data streams stored multiplexed together.

26. (Currently Amended) The apparatus of claim 19, wherein the controller is configured to control the pickup to record multi-angle data streams in the data area, and the playitem further includes a field indicating an angle number.

27. (Previously Presented) The apparatus of claim 19, wherein the controller is further configured to multiplex the data streams together.

28. (Currently Amended) The apparatus of claim 20, wherein the controller is configured to control the pickup to reproduce multi-angle data streams from the data area, and the playitem further includes a field indicating an angle number.

29. (Previously Presented) The apparatus of claim 20, wherein the controller is further configured to de-multiplex the data streams stored multiplexed together.